

Moving Forward: Accomplishments and Future Challenges

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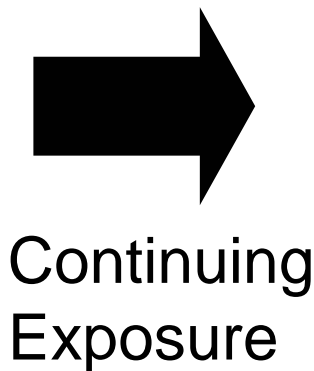
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Visionaries and Heroines

- **FNS** – Alberta Frost, Pat McKinney, Carol Olander
- **CSREES** – Karen Konzelman, Cheryl Oros
- **ERS** – Joanne Guthrie, Beth Racine, David Smallwood, Eileen Stommes, Jon Weimer
- **CDC/PHS** – Heidi Michels Blanck, Bill Dietz
- **NASULGC** – Linda K. Benning
- **SNE** – Jane Voichick
- **Co-authors and nutrition educators**

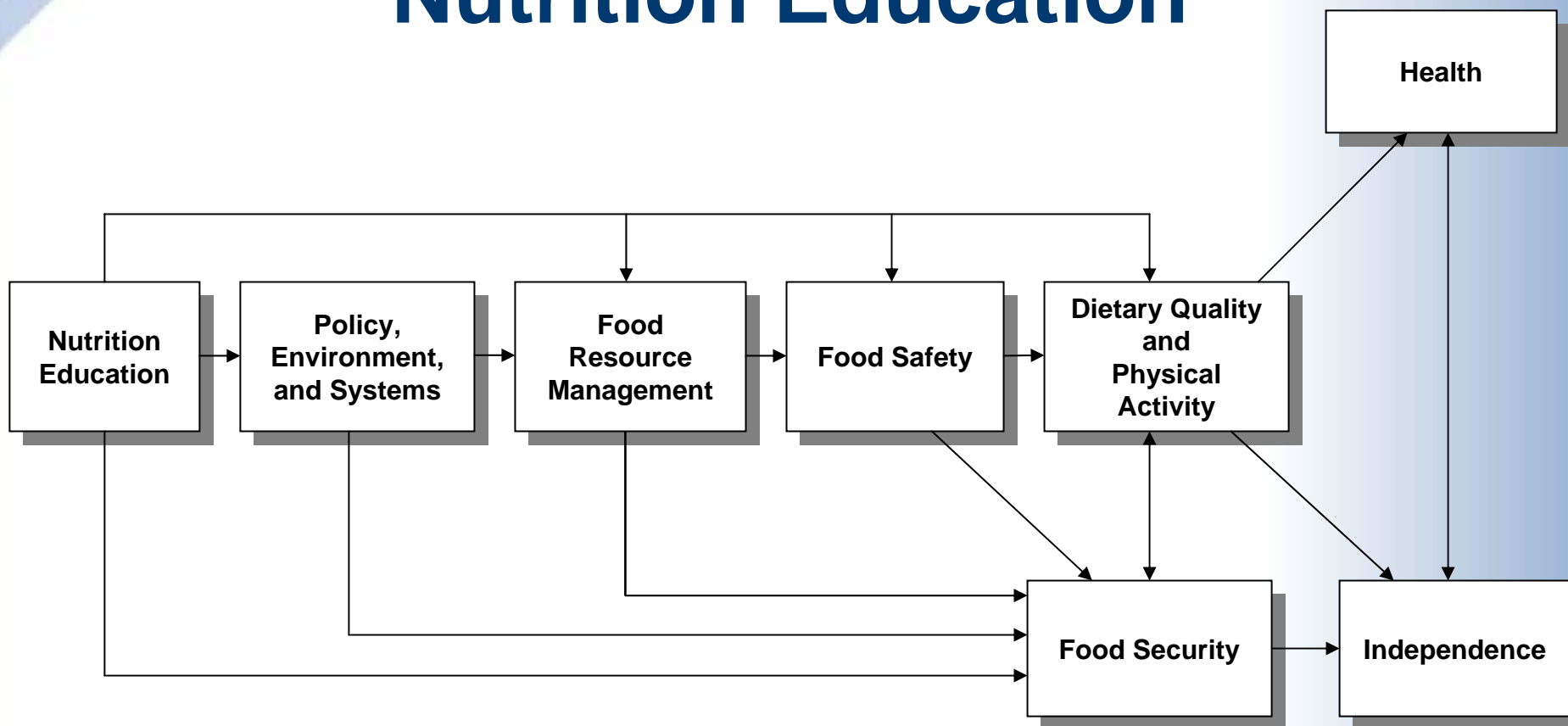
Nutrition Education Interventions

- One-on-one education
- Small groups in interactive education
- Social marketing campaigns
- Policy Change
- System Change



Sustained improvements in dietary behavior

The Chain of Effects of Nutrition Education



Evaluation White Papers

Five Key Indicators:

- System, Environment & Policy Change
- Food Resource Management
- Food Safety
- Food Security
- Dietary Quality & Physical Activity

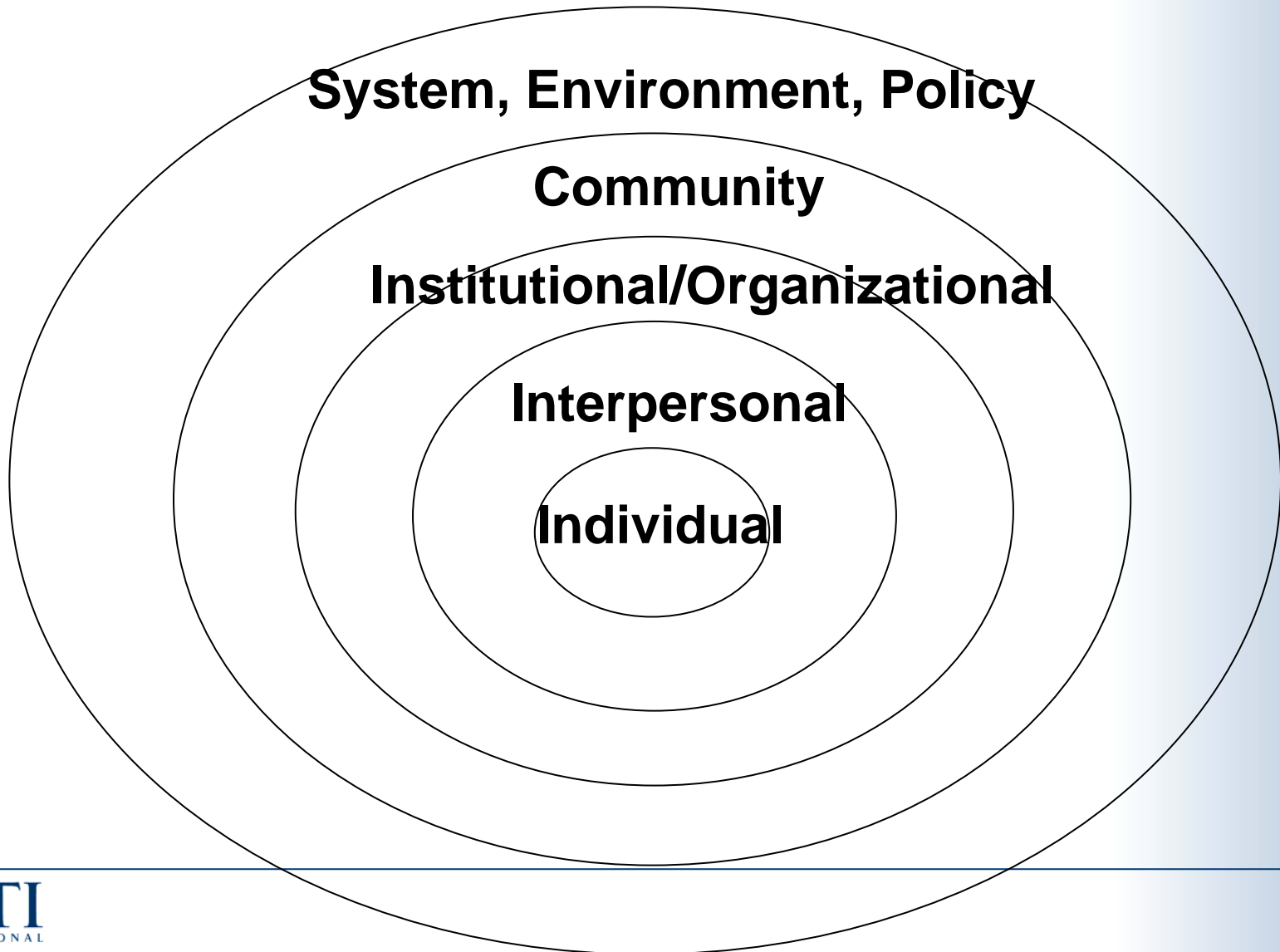
System, Environment, & Policy Change: Contributors

- **Jennifer Gregson**, CA Dept. Health Svcs.
- Mary McPhail Gray, Colorado State Univ.
- Jamie Benedict, University of Nevada Reno
- Bobbie Clarke, University of Tennessee
- Sue Foerster, Jan Lewis, CA Dept. Health
- James Hersey, Research Triangle Institute
- Larry Jones, University of Wisconsin
- Robin Orr, University of Illinois
- Karen Zotz, North Dakota State

System, Environment, & Policy Change: Accomplishments

- Helped establish the value of system change
- Disseminated an evaluation framework
- Identified process and impact measures
- Described examples of impacts

Social-Ecological Model: Spheres of Influence



Why is Social-Ecological Thinking Important?

- Nutrition behavior has multiple determinants
- Education requires availability of nutritious choices
- Nutrition behavior is influenced by cues to action
- Changes in policies, communities, organizations can be:
 - ◆ Cost effective
 - ◆ Ongoing
 - ◆ Important in maintenance of nutrition behavior

System, Environment & Policy

Examples

- NJ: negotiated policy change to deliver education to participants in employment and training programs
- ME: collaborate with farmers markets to accept food stamps, increasing access to low-cost produce.
- GA: convinced schools to stock bottled water in vending machines as an alternative to soft drinks
- WI: placed bus routes near supermarkets
- PA: coverage of diabetes nutrition education

System, Environmental, Policy Change: Gaps and Challenges

- Convince the skeptics
- Assure reach to low-income populations
- Demonstrate effects of FSNEP programs
- Synthesize findings across multiple states
- Demonstrate the synergy between system change and in-person nutrition education

Food Resource Management: Contributors

- **Jean Anliker**, MA FSNEP
- Colleen Bray, Colorado State Univ.
- Phyllis Dennee, Montana State Univ.
- **Jim Hersey** and Sarah Daugherty, RTI
- Chris Miller, HSR
- Rebecca Mullis, Univ. of Georgia
- Madeleine Sigman-Grant, Univ. of Nevada

Food Resource Management: Accomplishments

- Respond to interest of target audience
- Identified existing instruments
- Demonstrated link to dietary quality

Food Resource Management: Gaps and Challenges

- Develop practical intervention strategies
- Assess reliability and validity
- Demonstrate effects of nutrition education
- Demonstrate effects on dietary quality

Food Safety: Contributors

- **Lydia Medeiros**, Ohio State
- Virginia Hillers, Washington State
- Patricia Kendall, Colorado State
- April Mason, Purdue University

Food Safety: Accomplishments

Identified Key Behavioral Domains

- Personal Hygiene
- Adequate Cooking
- Cross Contamination
- Time Temperature
- Safe Food Sources

Food Safety: Gaps and Challenges

- Validate self-report measurement
- Adapt to needs of low income families
- Demonstrate effects of nutrition education
- Demonstrate maintenance of change

Food Security: Contributors

- **Debra Palmer Keenan**, Rutgers
- **Christine Olson**, Cornell University
- **Sondra Parmer**, Auburn
- **Jim Hersey**, RTI
- **Gary Bickel**, USDA

Food Security: Accomplishments

- Recognized the role nutrition education
- Identified practical measures
 - ◆ Food Security Question
 - ◆ Concern about Food Security
 - ◆ Radimer/Cornell Food Insecurity 13 items
 - ◆ Food Security Scale (18 items, 6 items)
 - ◆ Community Measures
- Reviewed reliability and validity issues
- Identified research gaps

Food Security: Gaps and Challenges

- Validate measures of moderate insecurity
- Assess the stability over time
- Demonstrate the effects of nutrition education

Dietary Quality: Contributors

- **Jackie McClelland**, North Carolina State Univ.
- Sheryl Lee, Arizona Health Dept.
- Jan Lewis, Susan Foerster, Paula Mara, Sharon Sugarman, Shirley Wu, Calif. Dept. Health Svcs.
- Jim Hersey, Christine Lindquist, RTI
- Debra Palmer Keenan, Kathleen Keller, Rutgers
- Suzanne Murphy, Univ. of Hawaii

Dietary Quality: Accomplishments

- Identified practical indicators
 - ◆ Fruits and Vegetables
 - ◆ Whole Grains and Cereals
 - ◆ Meat, Poultry, Eggs, Fish, and Beans
 - ◆ Dairy Products
 - ◆ Low Fats, Oils, Sweets
 - ◆ Physical Activity
- Reviewed reliability and validity
- Broadened the choices of measures
- Provided information for selection

Data Resource Guide

Pregnant Women and Children:

- PedNSS -- Pediatric Nutrition Surveillance System
- PNSS -- Pregnancy Nutrition Surveillance System
- PRAMS -- Pregnancy Risk Assessment Monitoring System

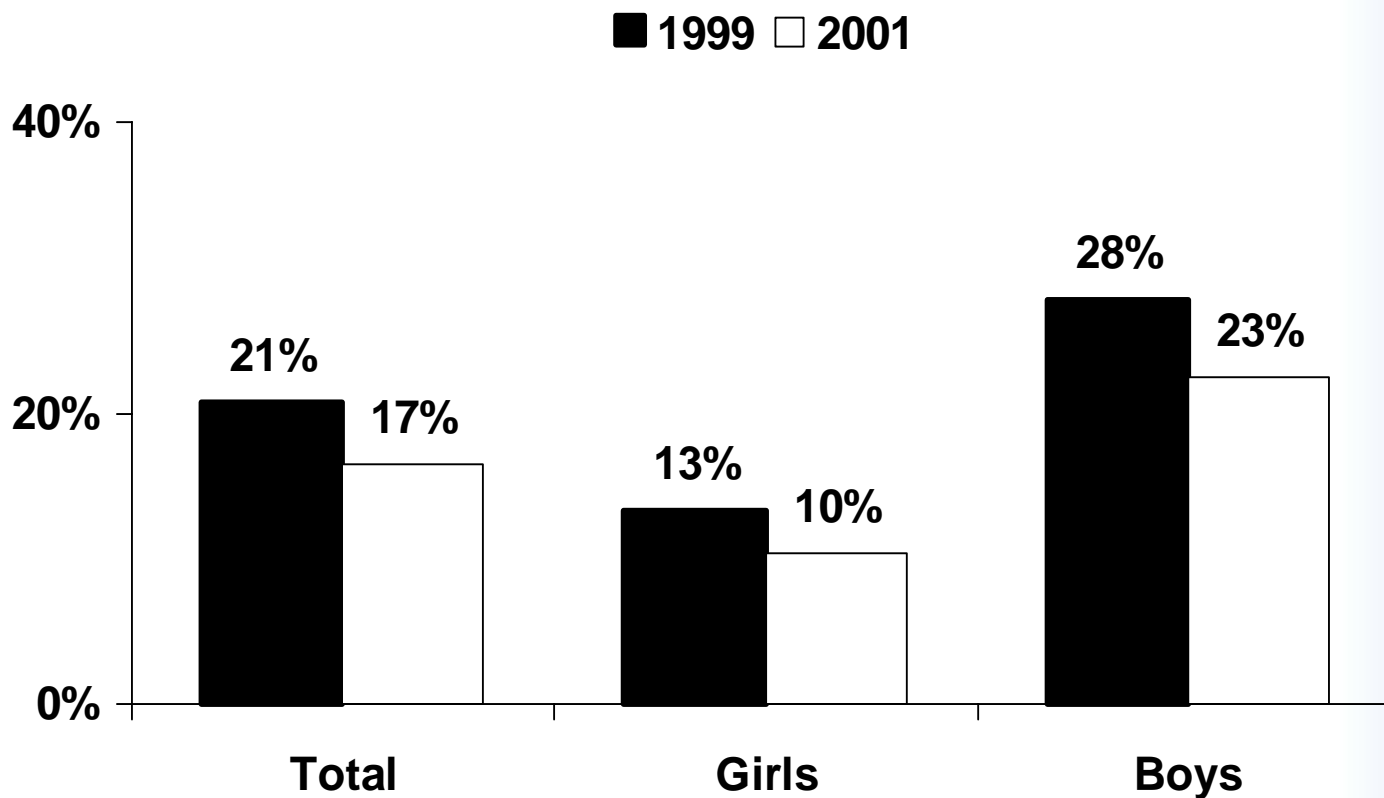
Youth:

- YRBSS -- Youth Risk Behavior Surveillance System

Adults and Households:

- BRFSS -- Behavioral Risk Factor Surveillance System
- CPS-FSS -- Current Pop. Survey – Food Security Supplement
- NHANES -- National Health and Nutrition Examination Survey
- NHIS -- National Health Interview Survey

Youth Milk Consumption in Nevada, 1999-2001 using YRBSS



Source: DHHS, CDC, Youth Risk Behavior Surveillance System, 2002

Dietary Quality: Gaps and Challenges

- Choice, not consensus
- Keep measures abreast of the epidemiology
- Implement studies with comparison groups
- Demonstrate effects of modest interventions
- Assure reach of community interventions to low income populations
- Challenges in synthesis

Organizational Challenges

- Multiple partners
- Limited resources for evaluation
- Limited resources for synthesis
- Choice of interventions influenced by availability of matching funds
- Time/intensity tradeoffs for evaluation

Next Steps

- Discussion in this FSNEP workshop
- Discussion in SNE workshop
- Input to shaping a research agenda
- Movement to implementation

Resources

- Evaluation of nutrition education with low-income families. *Journal of Nutrition Education*, 33, SS1, Sept/Oct 2001
- Review of efficacy of interventions. *Preventive Medicine*, 35, 25-41, 2002.
- Compendium of Data Resources (forthcoming)
- www.ers.usda.gov
 - Research Design (Hamilton & Rossi)
 - Household Food Security (Nord, Andrews, Carlson)

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